

## ABSTRACT

A flow calculation unit classifies packets of data to be transmitted according to each packet header. A stream data determination unit organizes a set of packets having the same packet header as a packet group according to the classified result by the flow number calculation unit, and determines whether to transmit with a bandwidth guaranteed according to the bit rate of the packet group. A bandwidth request command generation unit requests a bandwidth control device to reserve a bandwidth for the packet group determined to be transmitted with a bandwidth guaranteed by the stream data determination unit. Therefore, a bandwidth can be automatically reserved to allow data transmission even when no transmission condition is specified by the application.